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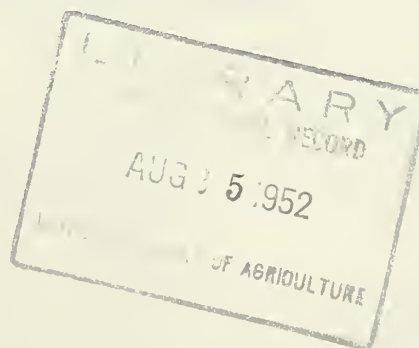


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# MARKETING ACTIVITIES



U.S. DEPARTMENT OF AGRICULTURE  
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## MARKETING ACTIVITIES

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A short item on the development of a new, quick, and cheap method for determining the oil content of soybeans was carried in the May 1952 issue of *MARKETING ACTIVITIES*. Because of the possible effect of this new development on the marketing of not only soybeans, but other oilseed crops as well, a more detailed story of the method appears to be in order. Here it is, by the men who did the work.

# Oil Content By Electronics

By W. Haward Hunt, M. H. Neustadt, Joe H. Hart, and Lawrence Zeleny

The oil content of a given lot of soybeans is the most important single factor in its intrinsic value, yet in the standards under which soybeans are marketed oil content is not a grading factor. The principal reasons this factor has not been used in the standards are the length of time and the skill necessary to make an oil content determination by the standard accepted procedures.

Under the present system of marketing soybeans, there is little incentive for the individual grower to produce soybeans of high oil content. The oil content of soybeans varies from approximately 15 percent to approximately 25 percent, on a moisture-free basis, with an average of about 19 percent. Since the ratio of the market price of the oil to the market price of residual meal is roughly 8 to 1, the profit to the processor is roughly proportional to the oil content of the soybeans. It would seem, therefore, that an incentive premium price paid to the grower for producing soybeans of high oil content should eventually mean a greater profit for both the grower and the processor.

## A New Principle in Determining Oil Content

Most of the accepted methods of determining oil content of oil-bearing seeds are based on gravimetric procedures; that is extracting the oil from the ground seeds with a solvent, removing the solvent, and then weighing the extracted oil. A new method, now available, provides for grinding the seeds and simultaneously extracting the oil with a solvent, and then measuring electronically the amount of oil in the solvent.

This new, rapid method for determining the oil content of soybeans was developed by the Production and Marketing Administration, USDA, in cooperation with a manufacturer of electronic equipment. It resulted from research at the Beltsville laboratories of the Grain Branch of PMA under authority of the Agricultural Marketing Act of 1946 (Title II-RMA). Cost of equipment used in this new method is approximately \$1000 as compared with a cost of approximately \$2000 for the equipment necessary to test an equal number of samples per day by the present official method of analysis.



The new method is rapid enough for use in the inspection of individual lots of soybeans as they are brought to the processing plant. At the same time, it is simple enough that operators without technical training can, with brief instructions, perform the analyses with speed and accuracy. It is estimated that two analysts working with two grinder-extractors and one electronic tester could analyze 20 to 30 samples per hour. Results on a single sample can be obtained in about 15 minutes. If a series of samples is analyzed concurrently, the time per sample is greatly reduced. An elapsed time of approximately 6 hours per sample is required by the present standard method of analysis and the number of samples that may be run concurrently is limited by the number of extraction units available.

### Background of the Electronic Tester

High-frequency oscillators have been in use for almost 40 years. However, the application of high-frequency oscillators to chemical analysis has occurred only within recent years. The electronic tester (See Fig. 1, page ), used in the new method is a high-frequency oscillator which measures the impedance of a dielectric in the test cell of the instrument. By plotting meter readings of the extracts of a large number of soybean samples against the known oil content of the samples as determined by the Soxhlet extraction method, a conversion chart was drawn up which translates meter readings directly into oil content.

### Grinding-Extraction of the Sample

To prepare the sample for measurement in the electronic tester, the sample is ground to a very fine state in the presence of a special solvent by means of a high-speed grinder-extractor (See Fig. 2, page ). This grinder-extractor is capable of grinding and simultaneously extracting the oil from a sample of soybeans in four minutes.

Since soybeans having a moisture content above 14 percent tend to emulsify with the solvent, a special infra-red drying cabinet has been designed and built for predrying soybean samples when necessary. This drying unit is capable of removing approximately 5 percent of moisture in five minutes from small samples of wet soybeans.

### Deviations Well Within Error Limit

In order to test the accuracy of the new method, 86 samples of soybeans ranging in oil content from 18.2 percent to 23.3 percent were analyzed under varying conditions of time and temperature of extraction, using two electronic testers for making readings under varying room temperatures and also at constant temperatures. From two to ten tests were made on each sample and the meter readings were graphically plotted against the oil content as determined by the Soxhlet extraction procedure. The standard error of estimate in determining oil content by the new method was found to be 0.27 in terms of percent of oil. The coefficient of correlation between the new method and the standard method was found to be +0.98. This means that the variation between the results obtained by the new method and by the Soxhlet method is within the limits

of variation that can be expected between replicate determinations by the Soxhlet method.

### Industrial Application

In order to test its efficacy under actual operating conditions, the equipment for determining oil content of soybeans by the new method has been placed in several soybean processing plants on an experimental basis. According to reports from these plants, the method has been found to be reliable, not only for the purpose designed but also for plant control work, such as determining rapidly the residual oil in press cake from expeller mills. It is anticipated that the equipment used in this new method, with appropriate variations in procedure, can be adapted to oil content determinations in nearly any kind of oil-bearing seed. Studies on its application to flaxseed are in progress.

Considerable credit for the success in developing this new method is due to the efforts of the Fred Stein Laboratories, Atchison, Kan., which worked closely with PMA's Grain Branch in designing, redesigning, and building the equipment.

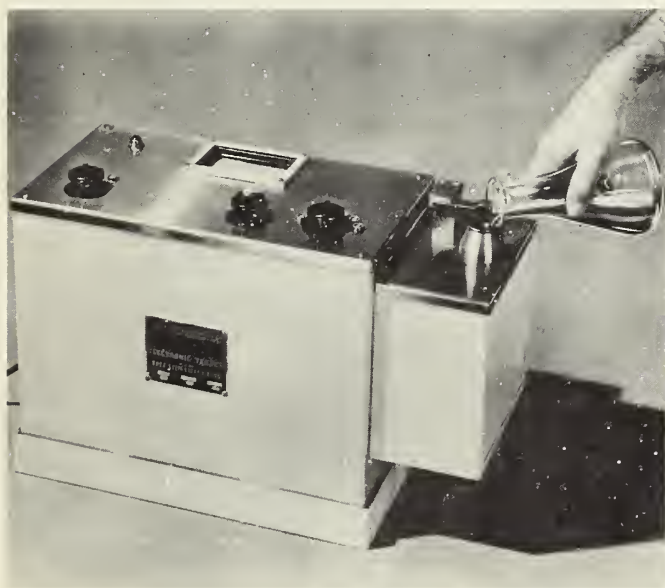


Fig. 1. Electronic tester for determining the oil content of a mixture of solvent and soybean oil.

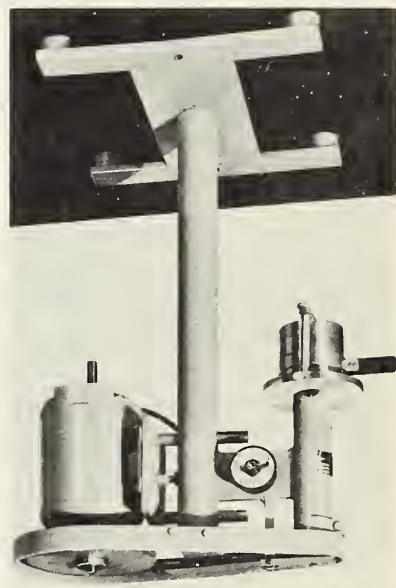


Fig. 2. High-speed grinder-extractor.

### NEW MOTION PICTURE ON APPLE HANDLING METHODS

"Apple Handling Methods", a 16mm sound, color film, made by the Washington State Apple Commission under research contract for USDA, has been released for showing in major apple producing areas. Covering handling methods and equipment, comparison of operation costs, and new improved methods, the film also is of value in connection with other food handling.

# Better Circulation; Cooler Cargoes

By Harold D. Johnson

Lower temperatures can be obtained in mechanically refrigerated trucks, used in transporting frozen foods, by promoting free circulation of air, according to results of two tests made by the Marketing and Facilities Branch of the Production and Marketing Administration, USDA.

Two truckloads of poultry were refrigerated in each test. One truck in each test was loaded and refrigerated in a conventional manner, while the other, loaded to promote better air circulation at the truck floor, had a return air duct attached to its refrigerating unit. In this way cold air circulated over, back of, and under the load to pick up heat entering through the floor, walls and ceiling of the vehicle.

The temperature of the trucks with the modified loads and air ducts was lower in all parts of the trailer. The total average difference in temperature was about 4° Fahrenheit under that of trucks conventionally loaded. Next to the floor, where it is usually difficult to lower the temperature, an average drop of 3.6 F. occurred.

## Floor Racks Aid Cooling

All the trucks tested, whether with modified loads and air ducts or not, had relatively high temperatures close to the floor. The report indicated that lower temperatures could be obtained in that area if floor racks were used which would permit better circulation of air.

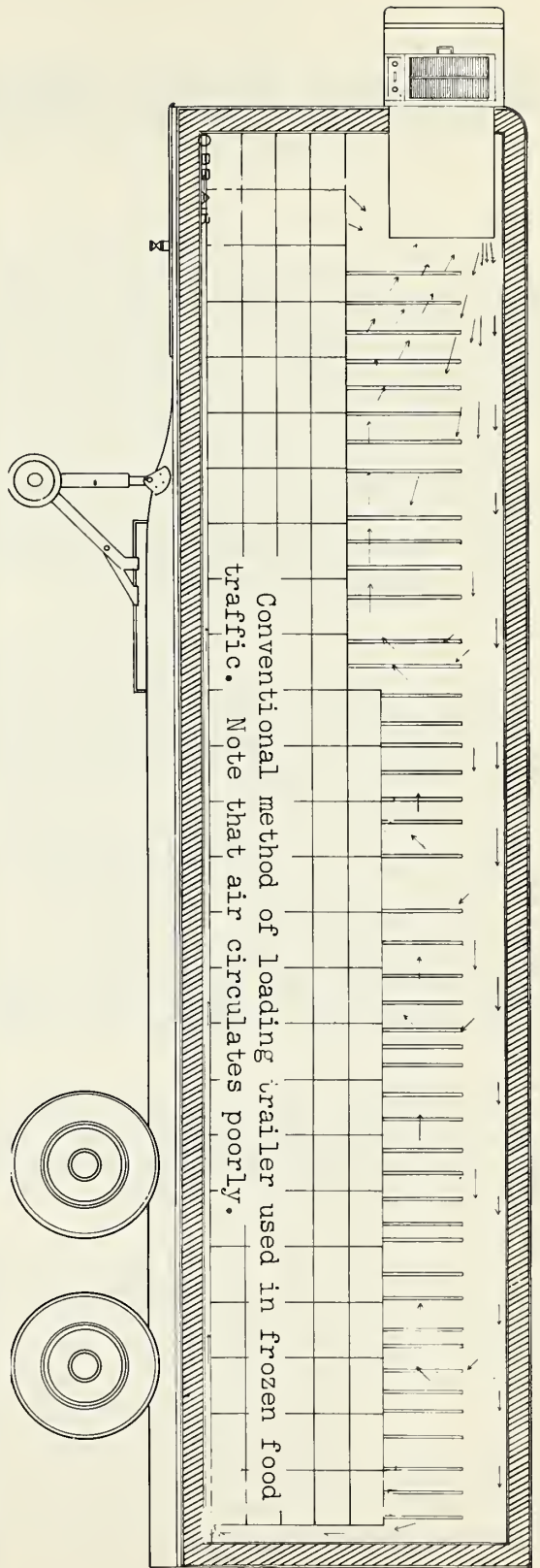
All four trucks used in the two tests had metal floors grooved with narrow channels, approximately one inch wide and one inch deep, spaced one inch apart. The spaces were found to be inadequate for the proper flow of refrigerated air accounting for the spread between the top and bottom temperatures even in the trucks with adjusted loads and air ducts.

## Side Wall Circulation Helps

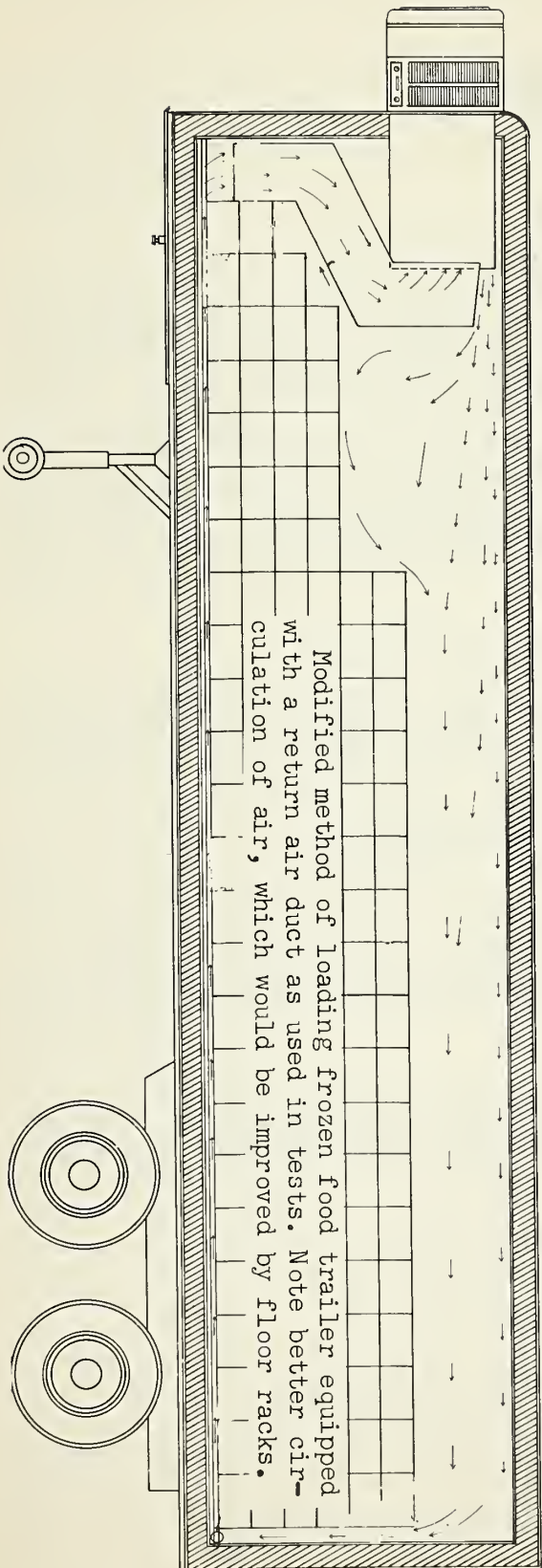
It was found that vertical strips nailed to the trailer side walls would provide air space permitting movement of air down the wall surface to the bottom. While this was not possible in the tests with poultry because the inside sheathing of the trailer was of metal, in previous tests, covering transportation of frozen food concentrate, better results were obtained through use of the strips.

A report now in preparation will cover results of the survey in greater detail. Availability of the report will be announced in a later issue of Marketing Activities.





Conventional method of loading trailer used in frozen food traffic. Note that air circulates poorly.



Modified method of loading frozen food trailer equipped with a return air duct as used in tests. Note better circulation of air, which would be improved by floor racks.

# Shipping Point Markets

By J. F. Reilly

The why and wherefore of shipping point fruit and vegetable markets--local markets to which farmers bring produce for sale to buyers who ship to big cities--and the factors that make them a success or failure are added up in a report cooperatively prepared by the Production and Marketing Administration and the Farm Credit Administration, USDA.

The report traces the history of this phase of marketing from its beginning around the turn of the century to the 99 successfully operating in 1950, stressing the factors that have encouraged their growth. They provide important marketing outlets in their respective areas and some of the fruits and vegetables they handle during certain seasons of the year are of national importance.

Prior to the development of shipping point markets close to the source of supply, most growers loaded their fresh fruits and vegetables into refrigerated cars and consigned them to commission merchants at terminal point markets located in the area where the product was to be consumed.

## Trend Away From Terminal Markets

The concentration of receipts on the terminal markets meant that those markets set prices. This did not prove satisfactory to many producers of fruits and vegetables. The producer had to wait several days after loading and shipping his products before he learned the prices he would receive.

During periods of heavy supplies and falling prices it was not unusual for fruits and vegetables to sell on the terminal markets at prices that did not give the shipper enough to pay the costs of harvesting, packaging, and transportation.

This is one of the principal reasons why the shipping point market developed. In this type market growers can know the price that prevails on the day they decide to sell their crops.

## Trucking Encourages Shipping Point Sales

Another factor that led to the development of the shipping point market was the arrival of the motor truck as an important carrier of fresh fruits and vegetables making possible the distribution of these products to the smaller consuming areas in less than carload lots. It

is now possible for the truck owner to drive into the producing area and buy his produce for direct transportation to the wholesalers or retailers.

Shipping point markets serve the public (1) by providing a place where growers can assemble a sufficient volume of products to attract the buyers; (2) by providing a place where the grower can receive cash for his produce at a relatively short distance from his farm; and (3) by establishing local prices.

### Successful Operation Factors

Several factors tend toward the successful operation of a shipping point market. Volume of produce handled is one of the more important. Adequate volume is necessary to attract a sufficient number of buyers, to insure competition between buyers, and to minimize the costs of operation. Volume per day is more important than volume per season or year. The smallest daily volume handled on any of the 85 markets surveyed was 1.8 carloads of high value produce such as strawberries or 3.6 carloads of average value produce such as cabbage, which indicates that markets might not be expected to operate on a smaller daily volume.

### Volume and Patronage Important

The volume of production for market in the area served and the number of growers who patronize the market are also important. Nearly all the shipping point markets now in operation are patronized by at least 10 percent of the growers within the immediate production area, but only a few markets are patronized by more than 50 percent of the growers. Analysis shows that the number of buyers patronizing markets increases in direct ratio to the volume of fruits and vegetables offered for sale.

Another point to be considered is that growers are reluctant to patronize markets more than 25 miles from their farms. Over 80 percent of the loads sold on shipping point markets originate within 15 miles of the market.

Other factors related to the success of the markets are: (1) good management, (2) adequate land and facilities; (3) fees that pay the cost of operations; (4) proper location of the market; (5) method of selling used; (6) ownership of the market.

### Auctions Found Most Popular

Auction sales are the most widely used method of selling and, according to the report, have several advantages over the private sale method: (1) A comparatively small capital investment is required. (2) Auction sales, public in character, tend to stabilize market prices by giving growers and buyers full knowledge of transactions. (3) Open competitive bidding permits the price-making forces of supply and demand to come into full play. (4) Auctions require only one salesman: the auctioneer, making the cost of selling low.



The auction method has certain disadvantages. One of the most important is the limit on the amount of produce that can be sold during a given period. Also this method is not favored where the buyer and seller prefer to negotiate privately.

Market ownership is relatively unimportant it was found, provided management gives consideration to the interests of all groups concerned, does not put into effect rules and regulations that would jeopardize free trading between buyers and sellers, and does not discriminate against produce because of its State of origin or method of transportation.

### Market Failure Causes

An analysis of the cause of failure of 30 shipping point markets demonstrated that the majority ceased to operate because of: (1) competition from other markets or market outlets, (2) an insufficient volume of produce offered for sale, (3) lack of production in the market area, and (4) poor management.

From the assembled data, the survey recommends that the following points be considered before starting new shipping point fruit and vegetable markets.

1. The minimum daily volumes of business required is 3.6 average value carloads of produce or 1.8 high value carloads of produce.
2. Concentrate in the beginning on obtaining a relatively large percentage of the production of one or two major fruit and vegetable items and add an additional item from time to time.
3. Try to obtain 75 to 90 percent of the produce from an area within a 25-mile radius of the market's location.
4. The total production of fruits and vegetables for market in the local area should be about 5 times larger than the minimum daily volumes required by the market, unless it can be definitely determined that the new market will attract a larger percentage of the total market production than the average percentage attracted to the existing markets.
5. About 60 grower loads of produce are needed to supply the minimum daily volume required.
6. The management of a new market should attempt to obtain a minimum of three "season" buyers and as many "day" buyers as possible. After the market becomes established, an average daily volume of 3.6 carloads of produce should attract 7 or 8 buyers.

The report, made under the authority of the Agricultural Marketing Act of 1946 (RMA Title II), will cover shipping point fruit and vegetable markets in considerable detail. Availability of the report, not yet off the press, will be announced in a later issue of Marketing Activities.



# Shipping Carton Economies

By Beulah C. Robertson and William A. Aronow

Substantial economies in the use of fibreboard in master containers for shipping prepackaged tomatoes may be possible according to findings of a preliminary study of such packaging made by the Fruit and Vegetable Branch, Production and Marketing Administration, U. S. Department of Agriculture.

The study developed the fact that some tomato shipping containers used more than three times as much fibreboard per tray of tomatoes as other containers. Also, it was found, for example, that the most economical of the 10-unit master shipping containers required 40 percent less material than the average for containers of that size group.

The investigation dealt only with the amount of fibreboard used in the tomato shipping containers and did not go into the question of efficiency of the individual containers examined. All the containers, however, are in use in the trade. A forthcoming report will show that, while the data obtained do not provide a complete basis for evaluating the containers, they do suggest one possible avenue for reducing the cost of packaging materials. Furthermore, it is apparent from the great variation in the amount of fibreboard used in these containers that there is an opportunity and need for cooperative effort by the tomato industry in simplifying and standardizing such containers.

The study covered 49 containers, or about one-third of the number of fibreboard containers believed to be in use for shipping prepackaged tomatoes. Some tomato prepackaging plants use lug boxes or wirebound crates for shipping prepackaged tomatoes to retailers although the majority use fibreboard containers for this purpose. The containers studied were of five different types. (See chart on next page.)

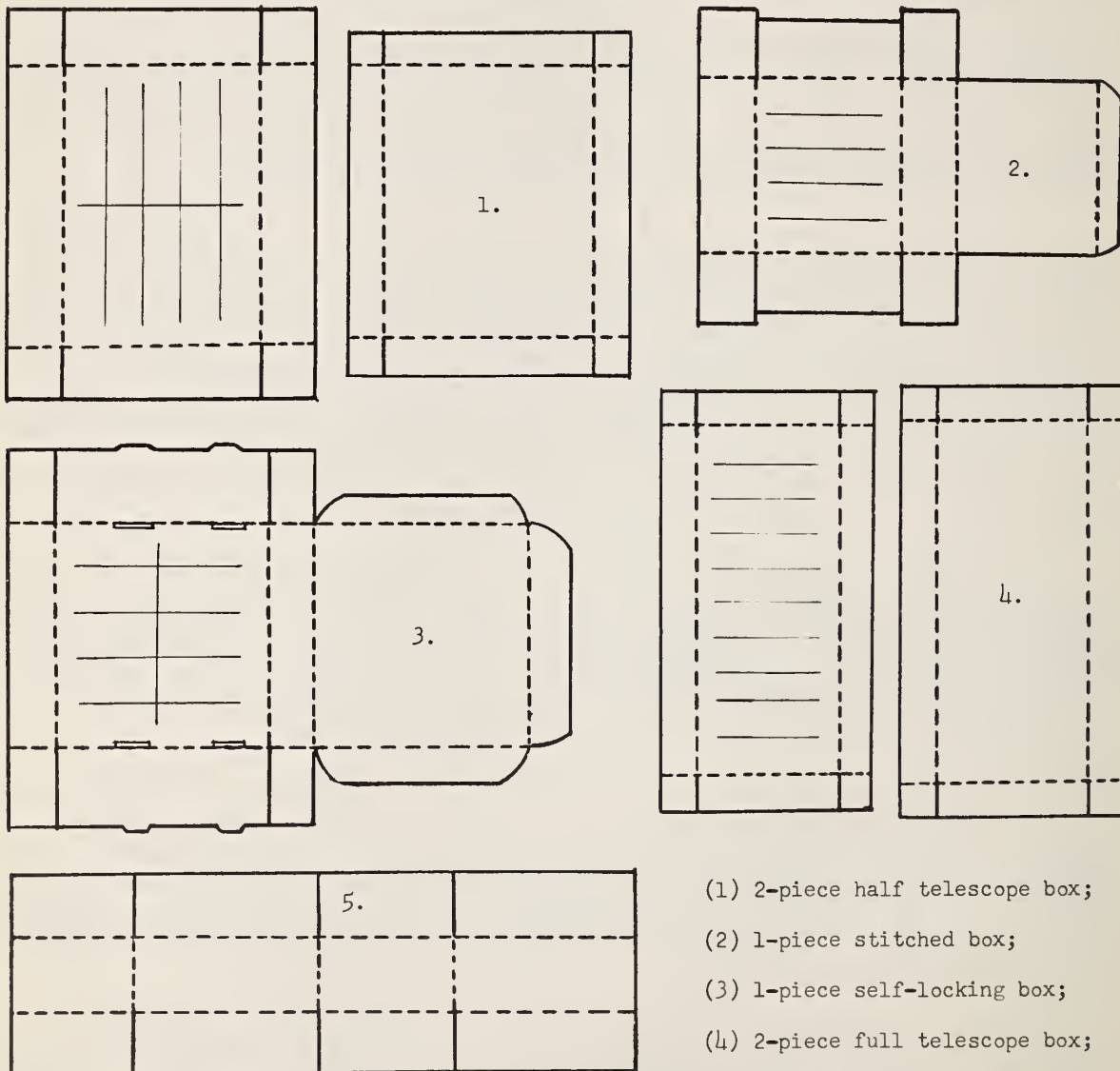
It was found that the amount of fibreboard used in the master containers varies widely, ranging from 33 to 107 square inches per tray of tomatoes packed in them. Some of the trays were of a size to hold three tomatoes, and others, slightly larger, held four or five, depending on the size of the tomatoes. These variations in sizes of trays, however, were not sufficient to destroy the value of the comparisons of master containers made in the study.

Types of containers found to be most economical in use of fibreboard were the one-piece stitched box, the regular slotted box, and the two-piece half telescope box. One-piece self-locking and two-piece full telescope boxes were found less economical in use of material.

Containers holding 20 trays of tomatoes used less fibreboard per tray than those holding 10 trays, while two-layer containers generally used less fibreboard per tray than one-layer containers.

Approximately 40 percent less fibreboard was used in the most economical 10-unit container studied than was used, on the average, in the other 10-unit containers studied. The most economical 10-unit container was a one-piece stitched box holding two layers of five trays each. Among the 20-unit containers studied, approximately 25 percent less fibreboard was used in a one-piece stitched box which held two layers of 10 trays each than was used, on the average, in the other 20-unit containers.

Five types of knocked down fibreboard master containers for tomatoes:



- (1) 2-piece half telescope box;
- (2) 1-piece stitched box;
- (3) 1-piece self-locking box;
- (4) 2-piece full telescope box;
- (5) 1-piece regular slotted box.

# The Egg and You

By A. William Jasper

Two housewives learned a great deal about the eccentricities of both eggs and human beings as they interviewed Providence, Rhode Island consumers last Fall and this Spring. The egg survey was jointly sponsored by the Rhode Island Agricultural Experiment Station and the Production and Marketing Administration, U.S.D.A.

Under the direction of Fred R. Taylor and the author, Mrs. Harold Gulvin and Mrs. Charles Kneeland, wives of University of Rhode Island professors, each armed with an egg micrometer, egg scale, charts, paper plates and towels, visited 605 homes. Instead of breaking bread, they broke eggs, to determine the quality of eggs in homes in relation to their price and point of purchase.

They investigated the housewife's buying habits; the source of her egg purchases; the price paid; the quality; and found out what she likes and doesn't like about the eggs she finds in the market.

## Purpose of Study

The primary purpose of the study was to relate quality of eggs in homes to points of purchase and prices paid, and to determine retailer handling practices as they affect egg quality. Although the study is not yet completed, preliminary findings do show some interesting things with regard to the quality and size of eggs the homemakers thought they had on hand. The findings also surprised some housewives (although it probably will not surprise the poultry industry) as to what size eggs give them the most in weight for price per dozen.

The investigators received a good reception at most homes, but they know now how a peddler feels when turned away from the door. One man, who was televiewing the World Series, objected loudly and rudely to any possible interruption of the program even though it was explained that the interview would take place with his wife in the kitchen. And a few men, whose wives were not home, refused to let the lady interviewers in the house on the ground that the "neighbors might talk."

While the survey developed many points of interest to egg producers and egg handlers, it also brought out items of benefit to egg buyers. In the Fall survey, for example, 294 dozen eggs (96.4 percent of the dozens sampled) were purchased by the housewife as Grade A. Analysis revealed that only 198 dozens or 67.3 percent actually qualified as Grade A, while 81 dozens (27.6 percent) were Grade B, and 15 dozens (5.1 percent) Grade C, after an average of 4 days from time of purchase.



The descriptions of A, B, and C quality eggs, as described in the United States Standards for Quality of Individual Shell Eggs (effective July 1, 1952), show the fact that the housewife lost some of the quality of her purchases. In an "A" quality egg the shell must be clean, unbroken, and practically normal. The air cell must not exceed  $2/8$  inch in depth and must be practically regular. The white must be clear and at least reasonably firm so that the yolk appears at least fairly well defined when the egg is twirled before the candling light. The yolk must be practically free from apparent defects.

A "B" quality egg is one in which the shell must be clean, unbroken and may be slightly abnormal. The air cell must not exceed  $3/8$  inch in depth and may show total movement not in excess of  $3/8$  inch. However, an air cell not over  $2/8$  inch in depth may be free. The white must be clear but may be slightly weak so that the yolk may appear off center with its outline well defined when the egg is twirled before the candling light. The yolk may appear slightly enlarged and slightly flattened and may show other definite but not serious defects.

In a "C" quality egg, the shell must be clean, unbroken, and may be abnormal. The air cell may be over  $3/8$  inch in depth and may be bubbly or free. The white may be weak and watery so that the yolk may appear off center and its outline plainly visible when the egg is twirled before the candling light. The yolk may appear dark, enlarged, and flattened and may show clearly visible germ development but no blood due to such development. It may show other serious defects that do not render the egg inedible. Small blood spots or clots may be present.

#### Retailers' Stocks also Studied

Analysis of the results of the survey will attempt, in addition to the major objectives, to determine where some of this loss of quality took place. Along with the consumer survey a study was made of those retail outlets where the homemakers interviewed bought their eggs. Three dozen eggs were purchased and put through laboratory tests at the end of each day to find out the approximate quality decline between the retail outlet and the breakfast table.

When the 294 dozens were tested to find the correct size of each egg it was found that of the 12 percent of the eggs purchased as Jumbo or Extra-Large, only half belonged in that classification. Fifty-four percent were purchased as Large, but only 32 percent were actually in that size range. This means that some buyers in Providence are receiving Medium and Small eggs in place of the larger size eggs they intended to purchase.

To find out which particular size of eggs were the best buy, and not allowing for the fact that some eggs were undersized, the investigators weighed the eggs and translated the per dozen price into price per pound. They found that Jumbo eggs averaged 47 cents per pound, Extra Large 52 cents per pound, Large 56 cents per pound, Medium 55 cents per pound, Small 52 cents per pound, and Peewee 45 cents per pound. This indicates that during the Fall study the most economical buy for the house-



wife was the Jumbo or Peewee eggs. Preliminary analysis shows that this was not true, however, during the Spring survey when large eggs were apparently the best buy.

It would seem that some housewives do better to purchase their eggs directly from the farmer or from an egg peddler. Seventy-two percent of the eggs so purchased in October were Grade A. Approximately 68 percent of the eggs from dairy and poultry markets were Grade A. Grocery stores came next with about 65 percent Grade A. Eggs from miscellaneous outlets such as drugstores ranked lowest with only 55 percent of the eggs rated as Grade A.

A few of the other variables considered by the investigators were the length of time between purchase and consumption, time between purchase and refrigeration, and consumers' methods of using eggs.

Some of the women interviewed did not know a good egg from a bad one. The interviewers used colored pictures of broken-out eggs in the different egg quality grades to test the housewives. Seventy-six percent of the women selected the A or AA quality eggs as the better eggs. Fourteen percent selected the B quality egg as the best and 10 percent selected the C quality egg as the best.

#### Some Housewives are Good Judges of Eggs

Remarkably accurate results were achieved by some of the women using common sense methods of egg judging. One woman, originally from Maine, correctly judged fresh eggs by firm whites. She had heard that an egg which spread over a plate or bowl was not all it should be. Her standard was correct according to experts in charge of the tests.

Some men made high scores in egg quality judging. One 12 year old boy, for example, topped his grandmother by correctly rating all of the half dozen broken out in her home.

A few women interviewed actually preferred low quality eggs. One of them liked eggs that spread out when broken. "They are best," she said, "for fried egg sandwiches."

The survey found that there was a considerable variation in the price paid for eggs represented as Grade A within the same size class. The survey also found that the common assumption that a higher quality is obtained by paying a higher price for eggs in the same size range is not necessarily true. Consumers who bought eggs at lower prices often got eggs just as good as those paying higher prices.

Among the less valuable but more interesting items were the following: most Providence households prefer their eggs soft boiled, fried, scrambled or poached in that order. Then too, there are non-conformists like the man who used raw eggs only and in no other way than in a large glass of orange juice.

They also found a man who watched the markets with an eagle eye for AA eggs to put in his beer.

# Defect Detector Developed

By George B. Dever, Jr.

As Columbus demonstrated with the egg, certain problems have simple solutions. This is true of a new device for measuring defects of fresh fruits and vegetables to determine grade standards which we have recently developed in PMA's Fruit and Vegetable Branch.

It is just a clear piece of plexiglass,  $5\frac{1}{2}$  inches long, 3 inches wide and  $\frac{1}{16}$  inch thick, which has inscribed on one side 12 circles ranging in diameter from  $\frac{3}{32}$  to  $1\frac{1}{2}$  inches. While it may not go down in history like the egg the Great Mariner set on end, the idea behind it is as simple.

U.S. Standards for grades of fresh fruits and vegetables require the determination of the size of certain defects which affect grades. For example, stem and calyx cracks of apples are measured in length; red skin spot of the same fruit is measured in percentage of surface covered; and scab, insect stings, cedar rust spots, hail marks, drought spots, or other marks and scars are measured in terms of an area of specified diameter.

In the past, inspectors have determined these grade defects with the assistance of aluminum sizing gauges, fibre sizing boards, or just sheets of paper showing spots illustrating diameters of various sizes.

All of these aids for measuring defects have the disadvantage of being opaque, making it impossible for an inspector to see the entire surface of a defective area while making a measurement.

Use of these defect detector aids has given rise to much discussion. A friendly disagreement with a colleague over the size of a shoulder scar on a tomato viewed through an aluminum sizing gauge gave me the idea that if the gauge were made of transparent material there could be no room for argument. Such an aid also would be much more useful in measuring area of defects with an irregular outline and for determining defect areas in the aggregate. It would have to be made of a durable material, light in weight, and of a size convenient to use. Plexiglass was selected because it possessed all these qualities and is low in cost.

The first plexiglass aid was prepared by using a set of toolmaker's dividers to inscribe the circles. Since then, we have contacted several commercial firms to have the aids made in large lots. Orders have been placed with one company for 975 aids at a cost of 35 cents each, the best price it was possible to obtain. From this order, 225 aids will be issued to each Federal Market inspector and each Federal shipping point supervisor. The others have been ordered for the States of California and Florida for issue to shipping point inspectors. Orders from other States are being placed as the shipping season progresses.



# Marketing Briefs

(The program announcements summarized below are more completely covered in press releases which may be obtained on request from the Office of Information, U.S. Department of Agriculture, Washington 25, D. C. by citing the code number given at the end of each item.)

Cotton.--USDA has proposed an amendment to COTTONSEED grades providing for inclusion of linters as an optional factor in determining the quantity index for cottonseed. Grade of cottonseed is determined on both a quantity index (measurement of the amount of oil and protein available from the seed) and a quality index (measurement of the amount of foreign matter, moisture and free fatty acids in the seed). The amendment is proposed to be effective by August 1952 and written views or arguments on the proposal may be submitted to the Cotton Branch, PMA, USDA, Washington 25, D. C. not later than July 23, 1952. (USDA 1426-52)... A report on "Conditioning and Storage of Seed Cotton with Special Reference to Mechanically Harvested Cotton" is available from Office of Information Services, PMA, USDA, Washington 25, D. C. Among the findings is that seed cotton with 14% moisture or less may be stored safely for several months. (USDA 1423-52)

Dairy.--USDA announced Amendment 4 to Defense Food Order 3, permitting importers to bring cheese and casein into a bonded warehouse in the United States or into U.S. foreign trade zones without previous authorization from the Department. (USDA 1388-52)... USDA has offered to purchase nonfat dry milk solids, and, at the same time, has asked for offers to repackage its own stocks, up to a total of approximately 12,000,000 pounds. The operation, financed with Section 32 funds, will provide milk for the school lunch program and other eligible outlets. (USDA 1351-52)... The following actions were taken on milk marketing orders during the past month: Dubuque, Ia., Class I milk pricing provisions amended. (USDA 1306-52). Tulsa, Okla., changes in milk pricing, classification, and marketing area provisions set for hearing July 29. (USDA 1503-52). Central West Texas, USDA has recommended a Federal order regulating marketing milk in 19 cities and towns of this area with a population of 220,000. (USDA 1436-52). Boston, Lowell-Lawrence, Fall River, Springfield and Worcester, Mass. USDA has recommended changes in pricing provisions of these orders. (USDA 1494-52). Oklahoma City, USDA has amended order to increase Class I milk price differentials. (USDA 1377-52). Fort Smith, Ark., USDA has approved a Federal milk marketing order. (USDA 1425-52). Chicago, USDA has recommended several changes dealing with basic price formula, surplus manufacturing area, pool plant, and other provisions. (USDA 1493-52). Previously, USDA amended this order to increase price differentials and revise the automatic adjustment for trends in supplies and demand for milk. (USDA 1389-52). Milwaukee, USDA recommended changes to provide a new alternative "basic price" formula. (USDA 1524-52). Previously, USDA amended this order to increase milk price differentials and revise the automatic adjustment for trends in supplies and demand. (USDA 1391-52). Detroit, USDA amended order to lower prices for butterfat and skim milk used in manufacture of butter and nonfat dry milk solids during May, June and July. (USDA 1334-52). Rockford-Freeport, Ill., USDA recommended in-

crease in Class I price differential and reclassification of Class II cream as Class I. (USDA 1291-52). New Orleans, USDA amended pricing and other provisions of order. (USDA 1368-52). Muskegon, Mich., USDA has recommended Federal milk marketing order for this area. (USDA 1318-52). Omaha-Council Bluffs, USDA has recommended changes in pricing, classification, and marketing area provisions of order. (USDA 1415-52). Sioux-Falls-Mitchell, S. Dak., USDA has recommended a Federal milk marketing order for this area. (USDA 1456-52)

Fats and Oils.--Commodity Exchange Authority has scheduled hearings beginning July 28 at USDA in Washington on establishment of speculative limits on futures transactions in cottonseed oil, soybean oil, and lard. (USDA 1433-52)... Price support levels for 1952-crop PEANUTS, based on a national average of not less than \$239.40 per ton (and higher if 90 percent of parity on August 1 exceeds that figure), has been announced. (USDA 1355-52)... Export allocations for the 3rd quarter of 1952 of 100,000 pounds of commercial and sulphonated CASTOR OIL and 90,000 pounds of TUNG OIL have been announced. (USDA 1473-52)... Restrictions on use of CASTOR OIL subject to Defense Food Order 1, as amended, have been further eased in line with industry suggestions. (USDA 1518-52)

Fruits and Vegetables.--The following actions have been taken on marketing agreement and order programs: Oregon-Washington FRESH PRUNE order terminated. (USDA 1403-52). USDA has approved proposed amendments to Oregon, California, Washington and Idaho HOP marketing agreement and order subject to grower referendum. (USDA 1408-52). Similar action has been taken with respect to California TOKAY GRAPE agreement. (USDA 1308-52). Action has been taken as follows with respect to boards and committees administering marketing agreements: Pacific Coast WINTER PEAR control committee and alternates named. (USDA 1483-52). Desert GRAPEFRUIT administrative committee named. (USDA 1498-52). California ALMOND control board members and alternates named. (USDA 1359-52). Changes in membership of WALNUT Control Board have been made. (USDA 1324-52). Members and alternates have been named for PECAN Committee and Council. (USDA 1311-52). Selection of California PRUNE Committee and alternates has been completed. (USDA 1309-52). California RAISIN Board and Administrative committee replacements named. (USDA 1469-52). Colorado POTATO Committee named. (USDA 1329-52). U.S. Standards have been proposed for Florida GRAPEFRUIT which differ from those in existence covering the product from both that State and Texas. (USDA 1435-52). U.S. Standards for WINTER PEARS have been amended to bring Howell and Flemish Beauty types under that classification (USDA 1328-52). Standards for TABLE GRAPES, grown principally in California and Arizona were amended effective July 9, (USDA 1386-52). Revisions of standards have been proposed for: FRUIT PRESERVES (or jams) (USDA 1431-52), DRIED CURRANTS, (USDA 1429-52) and LIMES, (USDA 1289-52). Time for submitting views on proposed revision of U.S. standards for canned SWEET CHERRIES has been extended until November 1, 1952. (USDA 1287-52). USDA has offered to purchase CANNED SOUR CHERRIES to assist growers in marketing this year's abundant crop. (USDA 1476-52)

Grain.--Price support for 1952-crop WHEAT at a national average of \$2.20 a bushel to farmers, compared with \$2.18 last year, has been announced. (USDA 1416-52)... There will be no acreage allotments and no mar-



keting quotas on 1952 crop wheat. (USDA 1338-52)... Sales under the 1952-53 International Wheat Agreement opened June 25 at 3:30 p.m. (USDA 1379-52)... The International Wheat Council will meet in Washington, D.C., on January 12, 1953 to continue discussions on renewal of the International Wheat Agreement (USDA 1506-52)... U.S. grain exports totaled 618 million bushels during the 11 months ended May 1952 as compared with 550 million bushels during the same period the previous year. (USDA 1332-52)... USDA has purchased 15,000,000 pounds of flour for export to Formosa. (USDA 1448-52)... Through May 1952 farmers had placed 25,500,437 bushels of 1951-crop corn under price support. (USDA 1402-52)... Final report shows that farmers put 271 million bushels of small grain and related 1951 crops under price support as compared with 319 million bushels of 1950 crops. (USDA 1512-52)... Price support rates for different rice varieties from the 1952 crop have been announced. (USDA 1472-52)

Poultry and Eggs.--Purchases of shell eggs totaling 227,059 cases at a total cost of \$3,580,000 were announced as this program to divert surplus eggs from the market ended. The eggs are to be distributed this fall to school lunch programs and other eligible outlets. (USDA 1392-52).

Sugar.--Minimum "fair prices" for 1952-crop sugar beets which must be paid by processor-producers to be eligible for Sugar Act payments have been announced. (USDA 1366-52)... Similar announcement has been made with respect to Hawaiian sugarcane. (USDA 1286-52). A hearing on wages and prices in connection with the 1952-crop of Louisiana sugarcane has been set. (USDA 1449-52). Wage rates for sugarcane workers on the 1952 Florida crop have been announced. (USDA 1399-52). An amendment to the "Determination of Sugar Commercially Recoverable in the Beet Sugar Area", according to the Sugar Act of 1948, designed to accelerate payments under the act, has been announced. (USDA 1401-52). U. S. Standards for grades of edible sugarcane molasses were officially published July 10, 1952, to become effective August 9, 1952. (USDA 1505-52). A deficit of 200,000 short tons in the 1952 sugar quota for the Philippines has been prorated to Cuba, Dominican Republic, Haiti, Mexico and Peru. (USDA 1353-52)

Tobacco.--An average loan rate of 50.6 cents per pound for 1952-crop flue-cured tobacco and a schedule of loan rates by grades have been announced. (USDA 1467-52)... Previously, Secretary of Agriculture Charles F. Brannan called a national referendum among flue-cured tobacco growers to determine whether they favored marketing quotas either for one year (1953 crop year) or for three years (1953-54-55 crop years)--or were against quotas. (USDA 1434-52)

#### Farm Storage Loan Program Extended

The CCC program providing loans to farmers to finance construction or purchase of new farm storage facilities for grains and other storable crops has been extended until June 30, 1953, with certain revisions. The new loans will be available for up to 80 percent of the cost of such structures and will be repayable in four annual installments. Interest on the loans remains at 4 percent a year. Eligible for loans are any owner-operator, tenant, landlord, or partnership of producers.

## ABOUT MARKETING

The following addresses and publications, issued recently, may be obtained upon request. To order, check on this page the publications desired, detach and mail to the Production and Marketing Administration, U. S. Department of Agriculture, Washington 25, D. C.

### Addresses:

Summary of remarks by John H. Dean, Deputy Asst. Administrator for Commodity Operations, at a meeting of Mississippi County Committeemen at Biloxi, June 25-27, 1952.

### Publications:

Consumer Acceptance of Thermostabilized, Oil-Processed, and Natural Shell Eggs, Circular No. 902. April 1952. 13 pp. PMA (Printed)

How Federal Milk Marketing Orders are Developed and Amended (Reprint from Marketing Research Report No. 11). May 1952. 13 pp. PMA (Mimeographed)

Potential Market Outlets for Mohair. June 1952. 141 pp. Commodity Marketing Corporation. (Processed)

A Portable Mechanical Lift for High-Piling and Breaking out High-Piled Boxes of Apples. May 1952. 10 pp. PMA (Processed)

Cotton Quality Statistics United States 1950-51. Statistical Bulletin No. 110. May 1952. 63 pp. PMA (Printed)

Marketing of Nondrying Industrial Fats and Oils as Affected by Processing Methods. May 1952. 44 pp. PMA (Processed)

Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products. May 1952. 96 pp. PMA (Printed)

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